

## SAFETY AND HEALTH CONTROL CHARTS SUMMARY

**PHMC** - "Significant improvement" in the Recordable and Lost/Restricted Case Rates, first identified in September and October 1996, and has been stable at the improved level through fiscal year (FY) 1997, and these case rates are better than their respective DOE benchmarks. The Severity Rate has degraded, returning to a value similar to the previous baseline. The Severity Rate is still comparable to the DOE benchmark value, and appears to be decreasing once again. In accordance with Fluor Daniel Corporate's Zero Accident philosophy, Fluor Daniel Hanford, Inc., (FDH) is committed to reducing these rates even further. Implementation of the Integrated Environment Safety and Health (ES&H) Management System and Enhanced Work Planning will provide the means to achieve further improvements.

**Pacific Northwest National Laboratory (Pacific Northwest/PNNL)** - Recordable and Lost/Restricted Case Rates have been stable for approximately two years. Significant improvement in Severity Rate has been stable since September 1995. Significant improvement noted in First Aid Case Rate.

**Bechtel Hanford Inc. (ERC)** - Recordable and Lost/Restricted Case Rates have been stable for approximately two years. Significant improvement in Severity Rate has been stable since August 1996. The ERC OSHA Recordable Case Rate average of 3.63 for the past 12 months is below the U.S. Department of Energy Construction Benchmark of 5.3.

## SIGNIFICANT SAFETY AND HEALTH EVENTS

- **Hanford Severity Rate:** There has been a significant increase in the overall Severity Rate (lost or restricted work days per 200,000 hours) for April 1997 through October 1997. The control chart has been rebaselined for that time interval, showing the increase in comparison to June 1996 through March 1997. Current data since October 1997 has been low, though further days may accumulate on these cases.
- **PHMC Severity Rate:** From October 1, 1996, through March 1997, there were 45 lost or restricted cases with an average of 15 days per case. All of these cases have been closed. Following this time period, we have experienced an increase in the number of restricted days, which has been seen as an increase in the Severity Rate. (Note: The Lost/Restricted Work Day Case Rate did not increase.) The severity rate increase occurred from April 1997 through October 1997. During that period there were 56 cases with an average of 37 lost or restricted days per case. Five of the 56 cases are still open and accumulating restricted days.

For FY 1998 to date there have been 18 lost or restricted cases of which three remain open, and the average number of days per case is 14 days. Recent severity rate data appears low, but these cases may accumulate additional days.

- **PNNL First Aid Case Rate.** There has been a significant reduction in First Aid Case Rate at PNNL, with the past seven months in a row below the baseline average.
- **PHMC Radiological Protection:** Fourth quarter CY 1997 data became available, and the graphs have been updated/revised using this data. No significant trends currently exist on the graphs in this report. During CY 1997, improvements in collective dose, and a decrease in the number and size of outdoor contamination areas were noted. The total collective PHMC Team dose for calendar year 1997 has decreased with a 154.5 person-rem dose as compared to calendar year 1996 with a 170 person-rem dose demonstrating a 9.1% reduction. Progress to decrease the number and size of outdoor contamination areas was achieved by reducing 1,130,210 square feet (10.5 hectares) and releasing two contamination areas.
- **PHMC "Million Safe Hours" Awards.** Recent safety awards have been given to the following contractors during the period October 1997 through February 1998:

November 1997	500,000 Hours at Numatec Hanford
January 1998	1,000,000 Hours at Fluor Daniel Northwest
February 1998	1,000,000 Hours at Lockheed Martin Hanford
February 1998	1,000,000 Hours BW Protec (including pre-PHMC hours)

These awards are based upon the total number of hours since the last Lost (away) workday for daily supervised workers by each contractor.

- **ERC Baseline Correction.** The ERC Lost/Restricted Workday Severity Rate Average was corrected for the baseline period of August 1996 - July 1997. This raised the baseline average from 53.16 to 63.92 Lost/Restricted Workdays per 200,000 hours. Several prior months Lost/Restricted Workdays were not updated to reflect actuals.
- **PHMC Occupation Analysis.** There are five occupations at the PHMC Team which account for 59% of all Lost or Restricted Workdays and 49% of all Lost or Restricted Workday Cases (October 1996 - February 1998). These occupations are:
  - Nuclear Process Operators
  - Health Physics Technicians
  - Pipefitters
  - Electricians
  - Ironworker / Riggers.

The primary hazards causing these injuries are overexertion and awkward body motion while performing physical exertions, such as lifting, pushing, pulling, or operating equipment. These primarily result in back strains and the cases are spread among almost all PHMC contractors. At the March 1998 "Presidents' Zero Accident Council", the PHMC contractors were tasked with developing action plans to reduce injuries of this type to these workers.

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**Note 1:** Control charts used in this report indicate whether program data is stable (i.e., within 3 standard deviations of the average) or unstable (i.e., outside 3 standard deviations of the average) and if a negative or positive trend exists. Stable program data does not mean a program is satisfactory. Statistically significant determinations use Deming Statistical Process Control criteria.

**Note 2:** The control charts submitted in this report fulfill the reporting requirements of Letter, J. D. Wagoner, RL, to President, FDH, "Contract No. DE-AC06-96RL13200 - Reporting of Safety Statistics to RL," dated November 4, 1996; Letter, S. A. Sieracki, RL, to J. F. Nemec, ERC, "Reporting of Safety Statistics to RL," CCN038876, dated October 21, 1996; and Letter, QSH-96-048, dated November 4, 1996, from John D. Wagoner, Manager, U.S. Department of Energy, Richland Operations Office to Dr. W. J. Madia, Director, Pacific Northwest National Laboratory, Subject: "Reporting of Safety Statistics to RL".

